

SENSITRON
SEMICONDUCTOR

TECHNICAL DATA
DATA SHEET 748, REV. A

POWER SCHOTTKY RECTIFIER
Very Low Voltage Drop

DESCRIPTION: 45 VOLT, 15 AMP, POWER SCHOTTKY RECTIFIER IN A HERMETIC SHD-1/1B PACKAGE.

MAXIMUM RATINGS

ALL RATINGS ARE @ $T_C = 25\text{ }^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MAX.	UNITS
PEAK INVERSE VOLTAGE	PIV	45	Volts
MAXIMUM DC OUTPUT CURRENT (With Cathode Maintained @ $T_C=100\text{ }^\circ\text{C}$)	I_O	15	Amps
MAXIMUM NONREPETITIVE FORWARD SURGE CURRENT ($t=8.3\text{ms}$, Sine)	I_{FSM}	280	Amps
MAXIMUM JUNCTION CAPACITANCE ($V_r=5\text{V}$)	C_T	800	pF
MAXIMUM THERMAL RESISTANCE (Junction to Mounting Surface, Cathode)	$R_{\theta JC}$	0.85	$^\circ\text{C/W}$
MAXIMUM OPERATING AND STORAGE TEMPERATURE RANGE	Top/Tstg	-65 to + 150	$^\circ\text{C}$

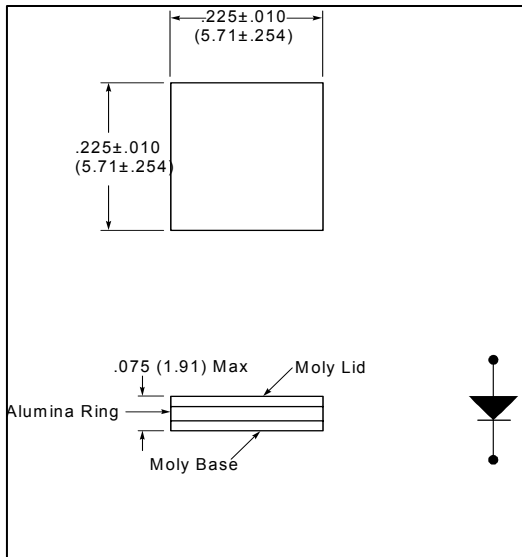
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MAX.	UNITS
MAXIMUM FORWARD VOLTAGE DROP, Pulsed ($I_f = 15\text{ Amps}$) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	V_f	0.56 0.51	Volts
MAXIMUM REVERSE CURRENT ($I_r @ 45\text{V}$) $T_J = 25\text{ }^\circ\text{C}$ $T_J = 125\text{ }^\circ\text{C}$	I_r	1.5 70	mA

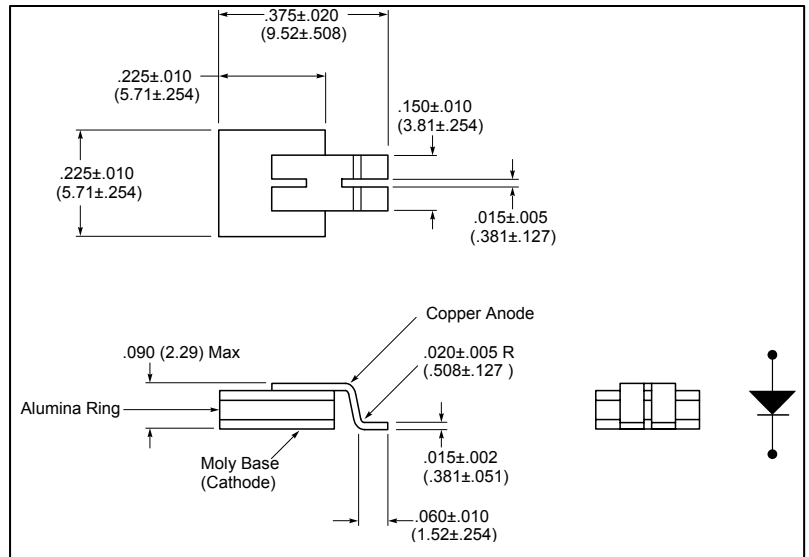
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MECHANICAL DIMENSIONS: In Inches / mm



SHD-1



SHD-1B

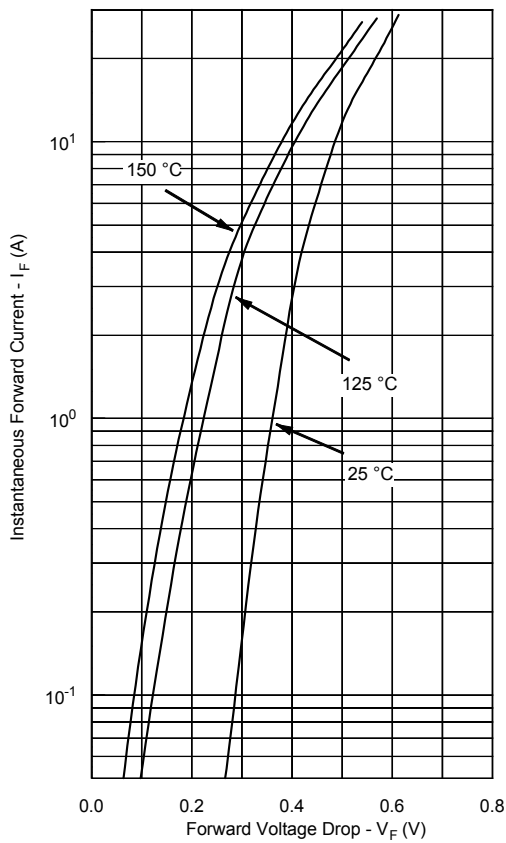
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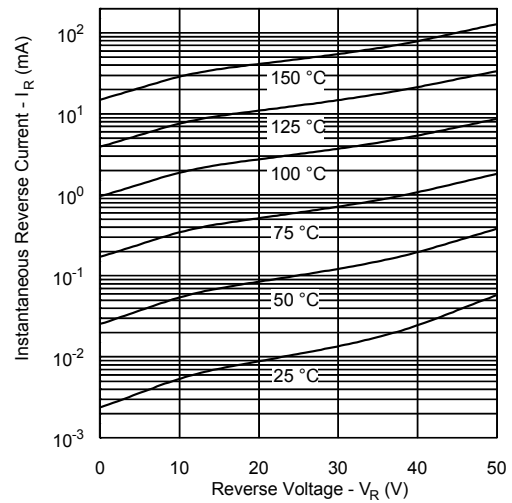
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Note: V_F Curves are shown for die only.

Typical Forward Characteristics



Typical Reverse Characteristics



Typical Junction Capacitance

